CLAIMS

What is claimed is:

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1. A governor for use in an engine provided with an overspeed protection device which is arranged to trip in the event that engine speed exceeds a predetermined speed, the governor comprising a centrifugal weight mechanism comprising at least one weight coupled to an angularly adjustable metering valve member through a lever member, the metering valve member being operable to control the level of fuelling of the associated engine depending on engine speed, the governor further comprising a damping arrangement associated with the lever member which is arranged to damp oscillatory movement of the lever member, in use, and a prevention arrangement for preventing the overspeed protection device associated with the engine from tripping upon engine start up.

2. A governor as claimed in Claim 1, for use in an engine having a drive shaft which is arranged to rotate at a speed associated with the engine, wherein the or each weight of the governor is pivotable with respect to and rotatable with the drive shaft, the governor further comprising a thrust washer member, interposed between the or each weight, and a thrust sleeve member which is cooperable with the lever member such that pivotal movement of the or each weight results in axial movement of the thrust sleeve member and, hence, pivotal movement of the lever member.

3. A governor as claimed in Claim 2, further comprising a first resilient bias arrangement which acts on the thrust sleeve member to urge the thrust sleeve member towards the thrust washer member.

4. A governor as claimed in Claim 3, further comprising a further resilient bias arrangement which serves to urge the lever member into engagement with the thrust sleeve member such that, upon engine start-up, the thrust washer member rotates with the or each weight.

5. A governor as claimed in Claim 1, wherein the metering valve member has a range of travel including a region of dead travel in which substantially no variation in fuelling of the engine occurs, and wherein the prevention arrangement comprises an adjustment member for limiting the range of travel of the metering valve member.

6. A governor as claimed in Claim 5, wherein the adjustment member is arranged to act on the lever member so as to limit the extent of movement of the lever member and, hence, the extent of angular movement of the metering valve member.

7. A governor as claimed in Claim 6, wherein the adjustment member takes the form of an adjustment screw.

8. A governor as claimed in Claim 6, wherein the adjustment member is adjusted such that the metering valve member does not move through the region of dead travel upon engine start up.

9. A governor as claimed in Claim 6, wherein the adjustment member is arranged to act directly on the lever member.

10. A governor as claimed in Claim 6, wherein the adjustment member is arranged to act on a surface associated with the damping arrangement, thereby to act on the lever member to limit the extent of movement of the lever member.

11. A governor as claimed in Claim 1, wherein the damping arrangement takes the form of a hydraulic damping arrangement.

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12. A governor as claimed in Claim 11, wherein the damping arrangement includes a damping piston which is slidable within a bore provided in a housing against a damping spring arrangement, the bore defining a working chamber for receiving a fluid which applies a force on the damping piston to oppose the damping force.

13. A governor as claimed in Claim 12, wherein the damping arrangement includes an anchor member which is adjustable to vary a pre-load of the damping spring arrangement.

14. A governor as claimed in Claim 1, wherein the damping arrangement takes the form of a hydraulic damping arrangement comprising a damping piston and a working chamber for receiving a fluid, whereby fluid pressure within the working chamber acts on a surface associated with the damping arrangement, and a restricted outlet for permitting fluid to flow into and out of the working chamber at a relatively low rate, the damping arrangement being provided with a by-pass arrangement to permit fluid to flow out of the working chamber at a higher, relatively unrestricted rate, thereby by-passing the restricted outlet and causing the damping arrangement to be disabled.

15. A governor as claimed in Claim 14, wherein the damping arrangement is provided with an additional outlet through which fluid can flow at a relatively unrestricted rate compared to the rate of flow of fluid through the restricted outlet, the damping piston being movable between a first position in which the additional outlet is obscured by the damping piston, in which case the damping arrangement is enabled, and a second position in which the additional outlet is not obscured by the damping piston, the additional outlet thereby providing a by-pass flow path for fluid within the working chamber so as to disable the damping arrangement.

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16. A governor as claimed in Claim 15, wherein the by-pass flow path is defined, at least in part, by a passage provided in the damping piston in communication with the working chamber and whereby, when the damping piston is in the second position, the passage communicates with the additional outlet.

17. A governor as claimed in Claim 16, wherein the damping piston is slidable within a bore provided in a housing against a damping spring arrangement, the bore defining the working chamber for receiving fluid.

18. A governor as claimed in Claim 17 wherein the damping spring arrangement is arranged such that the damping arrangement is disabled during movement of the metering valve member through the region of dead travel upon engine start up.

19. A governor as claimed in Claim 18, wherein the damping arrangement further comprises a further adjustment member for adjusting the damping spring arrangement such that the damping piston occupies a position in which the working chamber communicates with the additional outlet during the dead travel region of the metering valve member.

20. A governor as claimed in Claim 14, for use in an engine having a drive shaft which is arranged to rotate at a speed associated with the engine, wherein the or each weight of the governor is pivotable with respect to and rotatable with the drive shaft, the governor further comprising a thrust washer member, interposed between the or each weight, and a thrust sleeve member which is cooperable with the lever member such that pivotal movement of the or each weight results in axial movement of the thrust sleeve member and, hence, pivotal movement of the lever member.